STATE FOREST LAND
ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decided whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forestland proposals. Adjacency and landscape/ watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at http://www.dnr.wa.gov under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.*

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. *All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.*

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered " does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

   Timber Sale Name: **Nootka Thinning** *Agreement #:* **30-074263**

2. Name of applicant: **Department of Natural Resources**

3. Address and phone number of applicant and contact person:

   Pacific Cascade Region
   601 Bond Road
   PO Box 280
   Castle Rock, Washington 98611-0280
   Phone: (306) 274-2035
   Contact Person: Eric Wisch

4. Date checklist prepared: **6/24/04**

5. Agency requesting checklist: **Department of Natural Resources**

6. Proposed timing or schedule (including phasing, if applicable):

   a. *Auction Date:* **FY-2005_**
   b. *Planned contract end date (but may be extended)* **FY-2007**
   c. *Phasing:*

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

   Yes

   Timber Sale

   a. *Site preparation:* **No site preparation will be required.**
   b. *Regeneration Method:* **Unit #5 is approximately 2 acres in size and will be planted with a mixture of Douglas-fir and Western red cedar at approximately 300 trees per acre. The other Units will be thinned at a variable density prescription.**
   c. *Vegetation Management:* **None anticipated.**
   d. *Thinning:* **None anticipated.**

   Roads: **Road maintenance assessments will be conducted annually as needed and may include periodic ditch and culvert cleanout, and road grading as necessary. All temporary roads associated with this proposal will be abandoned upon completion of harvest activities.**

Rock Pits and/or Sale: **The pit will be maintained in a safe condition with proper drainage. The rock pit may be used for other current or future projects in the vicinity.**

Other: **Direct sale of firewood from the sale area may occur following harvest completion. Firewood salvage of logging residue may occur following harvest**

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

☐*303 (d) – listed water body in WAU:* ☐*temp.* ☐*sediment* ☐*completed TMDL (total maximum daily load):*
☐*Landscape plan:*
☐*Watershed analysis:*
☐*Interdisciplinary team (ID Team) report:*
☒*Road design plan:* **Road Plan available at the Pacific Cascade Region office.**
☒*Wildlife report:* **A report dated June 17, 2002 is available at the Pacific Cascade Region office.**
☒*Geotechnical report:* **The geologist report dated October 16, 2002 and supplement dated June 23, 2003 is available at the Pacific Cascade Region office.**
☒*Other specialist report(s):* **The Region silviculturist report dated June 17, 2002 is available at the Pacific Cascade Region office. A DNR Archeologist report dated January 3, 2003 has been completed, however it is not available to the general public.** ☐*Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):*
☒*Rock pit plan:* **The pit plan is available at the Pacific Cascade Region office.**
☒*Other:* **Spotted owl habitat mapping; Forest Practices Activity Maps; WAU map for rain-on-snow areas; Forest Resource Plan (DNR, July 1992); State soil survey; DNR GIS databases; Habitat Conservation Plan (January, 1997); HCP Checklist (attached); Slope Stability Checklist; Planning and Tracking Special Concerns Report and associated maps; Consistency determination for the Columbia River Gorge National Scenic Area (CRGNSA) Act from the United States Forest Service (USFS) dated June 11, 2003; Road maintenance and abandonment planning (RMAP) #2900196.**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No

10. List any government approvals or permits that will be needed for your proposal, if known.

☒*HPA:* **Blanket HPA for type 4 and 5 waters** ☐*Burning permit*
☐*Shoreline permit*
☒*Incidental take permit* **1168 and PRT-812521** ☒*FPA.2910397* ☐ *Other:*

11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)

a. Complete proposal description:

This proposed spotted owl habitat enhancement activity is located in the Columbia Nesting, Roosting, and Foraging (NRF) Planning Unit, and is approximately 3 miles northwest of Stevenson, Washington, in Sections 20, 21, 27, 28, , 29 and 34 of Township 3 north, Range 7 east, W.M. This activity involves the variable density thinning of primarily Douglas-fir, with small components of western hemlock, western red cedar, true fir, red alder, and big leaf maple. The age of the timber ranges from approximately 42 to 92 years old. The gross area of the seven units is approximately 259 acres. There will be approximately 27 acres left un-harvested in riparian management zones (stream buffers), and approximately 19 additional acres will be left un-harvested in small patches, or "skips", which will maintain unique biological and landscape features, leaving a net harvestable acreage of approximately 213 acres, which includes up to approximately 4 acres of right-of-way timber that will be removed with this proposal.

Sale of Timber
Estimated Total Volume: 2,880 MBF
Unit 1: 1,200 MBF
Unit 2: 50 MBF
Unit 3: 50 MBF
Unit 4: 700 MBF
Unit 5: 10 MBF
Unit 6: 170 MBF
Unit 7: 600 MBF
R/W: 100 MBF

Unit area (acres):

Unit 1: Gross Proposal Acres: 84
Leave Tree Acres: 8 (left in small "no cut" patches (skips)
RMZ Acres: 7
Net Harvest Acres: 69

Unit 2: Gross Proposal Acres: 13
Leave Tree Acres: 1 (skips)
RMZ Acres: 6
Net Harvest Acres: 6

Unit 3: Gross Proposal Acres: 5
Leave Tree Acres: 0
RMZ Acres: 2
Net Harvest Acres: 3

Unit 4: Gross Proposal Acres: 67
Leave Tree Acres: 6 (skips)
RMZ Acres: 7
Net Harvest Acres: 54

Unit 5: Gross Proposal Acres: 2
Leave Tree Acres: 0
RMZ Acres: 0
Net Harvest Acres: 2

Unit 6: Gross Proposal Acres: 23
Leave Tree Acres: 2 (skips)
RMZ Acres: 5
Net Harvest Acres: 16

Unit 7: Gross Proposal Acres: 61
Leave Tree Acres: 2 (skips)
RMZ Acres: 0
Net Harvest Acres: 59

Right–of-way harvest acres: 4

Total Proposal Area Acres (Gross): 259
Total Leave Tree Acres: 19
Total RMZ Acres: 27
Total road r/w acres: 4
Total Net Harvest Acres: 213 (includes R/W)

b. Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.

Overall Unit Objective:
The objective of this activity is to develop, or enhance the development of spotted owl nesting, roosting, and foraging habitat, while producing revenue for the trust beneficiaries. This objective will be achieved by following the guidelines set forth in: the Forest Resource Plan, the Habitat Conservation Plan, the Forestry Handbook, and Washington State Forest Practices.

Silviculture objective:
The primary silvicultural objective for this sale is to increase the growth rate of the timber stands contained within the sale area, while also increasing the variability of those stands. This will be accomplished by removing approximately 1/3 of the timber volume by thinning primarily from below, allowing the residual trees to grow more vigorously with less competition. The sale will be a prescribed variable density thinning with approximately 10% of the sale area left "untouched" in 26 scattered patches (skips) approximately ½ to 1 acre in size. Another 10% of the sale area in Units 1 through 6 will be even-age harvested in somewhat randomly distributed 0.25 to 0.5 acre patches (gaps). Only about 5% of the sale area in Unit 7 will be left in gaps due to the relatively high number of natural openings. No planting will be done in the gaps; however, some natural regeneration is expected from the seeds scattered by residual trees. Approximately 30% of the sale will be heavily thinned, and approximately 50% of the sale area will be lightly thinned. This will enhance the growth rate of the residual stands, which in turn should enable those stands to more rapidly meet the current spotted owl NRF habitat criteria. Unit 5, which is approximately 2 acres in size, is primarily hardwoods. The Schedule A prescription for this stand is to cut all of the hardwoods and replant the unit with a mixture of Douglas-fir and cedar. With input from the Region Silviculturist, the heavy and light thinning areas have been identified on the ground (boundary trees have been painted with two different colors) in patches of approximately 25 acres and smaller. This has been done to minimize the possibility of blow-down, maximize biological and structural diversity, and keep the design and operability of this sale practical and efficient. The two different thinning regimes will be prescribed using Schedule A's. A report by the Region Silviculturist is available at the Pacific Cascade Region office in Castle Rock for further details.

Wildlife Objectives:
The primary wildlife objective of this sale is to enhance and create northern spotted owl habitat. A total of 26 skips have been left within the sale. These are distributed throughout the units to contain relatively unique landscape or biological features. These features include: wet areas such as headwalls, potentially unstable areas, areas with large, sound snags, a few small areas containing large residual Douglas-fir, and areas containing large down woody debris. Those snags within the harvest area will only be retained if they meet Washington State Department of Labor and Industries logging safety guidelines. The gaps within the units are somewhat randomly distributed and are to mimic natural openings, which will help diversify the overall stand structure. The remaining sale area will be thinned at two different densities to speed up the growth rate of the remaining trees and enhance or develop a multi-storied canopy, which will promote a more diverse stand structure. All grubbed stumps originating from road construction will be placed in rows or clumps throughout the units (no further than 200 feet from their origin) as designated by the contract administrator to increase the down woody debris component. Those snags that must be felled for safety reasons shall remain where they fall. In addition, no existing down woody debris may be removed from the sale area. A Biologist report is available at the Pacific Cascade Region office in Castle Rock for further details.

Harvest Systems:
Tracked skidding will be permitted on all areas where slopes are less than 35% and accessible by roads. The rest of the harvest area will be yarded using cable systems, which will provide lead-end suspension of logs in order to minimize soil disturbance. Some settings will require intermediate supports to maintain the required lead-end suspension. The general design and boundaries of this harvest area were dictated by stand types, topography, the location and type of streams in and around the units, property lines, wind exposure, relative tree size within the units, and operability.

c. *Road activity summary. See also forest practice application (FPA) for maps and more details.*

Roadwork is outlined below, with site-specific details in the timber sale road plan available at the Pacific Cascade Region office.

Road Narrative:

There will be approximately 3,800 feet of required reconstruction, approximately 10,000 feet of optional reconstruction, and approximately 1,500 feet of temporary construction associated with this proposal. Approximately 23,000 feet of maintenance work will be conducted on the CG-2020 road prior to timber haul activities. Maintenance will include shaping and defining ditches, installing additional cross drains, and patch rocking where needed. Approximately 10,000 feet of the optional reconstructed roads and 1,600 feet of the temporary new constructed roads, if built, will be abandoned upon the completion of sale activities. Access to the sale will be from the existing CG-2020 road. The rock source for this proposal will come from either an approved commercial source, or the State-owned Blue Lake Pit located in Section 9 of Township 2 north, Range 7 east, W.M.

Rock Pits:

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		**1,600**	**1**	
Reconstruction		**13,800**		
Abandonment		**11,600**	**11**	
Bridge Install/Replace	**0**			
Culvert Install/Replace (fish)	**0**			
Culvert Install/Replace (no fish)	**34**			

Temporary roads: A temporary road is defined in Forest Practice rules as a forest road that is constructed and intended for use during the life of the approved forest practices application. All temporary roads must be abandoned in accordance with WAC 222-24-052(3). The length listed above is also included in the "Construction" and "Abandonment" sections of the chart above.

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. *(See timber sale map. See also color landscape/WAU map on the DNR website http://www.dnr.wa.gov under "SEPA Center.")*

a. Legal description: **Sections 20, 21, 27, 28, 29, and 34 of Township 3 North, Range 7 East, and Section 9 (pit) of Township 2 North, Range 7 East, W.M.**

b. *Distance and direction from nearest town (include road names):*

c. *Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website http://www.dnr.wa.gov under " SEPA Center.")*

WAU Name	WAU Acres	DNR WAU Acres	Sub-Basin Number	Sub-Basin Acres	DNR Sub-Basin Acres	Proposal Acres in Sub-Basin (estimated)
Rock Creek	**39,418**	**15,795**	**2**	**2,274**	**374**	**40**
			7	**1,393**	**1,006**	**86**
			8	**1,403**	**650**	**87**

The acreages listed above are from DNR /HCP/ WAU data layers.

13. *Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website http://www.dnr.wa.gov under "SEPA Center" for a broader landscape perspective.)*

Known and Observed WAU conditions:

Nootka Thinning is a variable density thinning located in the southwest portion of the Rock Creek WAU. Approximately one third of the timber volume will be removed, primarily by thinning from below. Most of the land contained within this WAU, and all of the land in the area of this sale, is state or private industrial timberlands. The DNR manages about 40% of the land base in the WAU. The WAU also contains the town of Stevenson and some rural residential areas. There has been periodic regeneration timber harvesting throughout the area and most of the WAU. Two other activities are currently scheduled to take place within the Rock Creek WAU, both of which are also variable density thinnings. One is Boilermaker VDT, which will be located a little over 4 miles west of Nootka. The other is Magpie VDT, which is located approximately ½ mile northeast of Nootka. Both of these are fiscal year 2003 sales. Another fiscal year 2005 sale- Mahatta thinning is having fieldwork completed and is located approximately 5 miles north of Nootka. The plans of the adjacent landowners are unknown.

Approximately one-quarter of this proposal (most of Unit 7) may be visible from parts of State Road 14, Interstate 84, and the Columbia River within the Columbia River Gorge National Scenic Area. This part of the proposal is contained within the Columbia River Gorge "Special Management Area". However, this proposal is a variable density thinning with the primary objective of enhancing and creating spotted owl habitat. This activity has gone through the Consistency Determination process for the Columbia River Gorge National Scenic Area (CRGNSA) Act from the United States Forest Service (USFS). It was determined that the proposal is consistent with the CRGNSA Act, provided certain conditions were met. These conditions have been addressed in the timber sale contract and road plan. The approved determination dated June 11, 2003, is located in the Pacific Cascade Region office in Castle Rock for a list of the these conditions and further details.

Mitigation elements:
This proposal follows the guidelines in the DNR's Habitat Conservation Plan, the DNR's Forest Resource Plan and State Forest Practices regulations. Several measures have been taken to mitigate potential environmental impacts.

- **Approximately two thirds of the total timber volume within the sale area will be left un-harvested.**
- **Approximately 27 acres of RMZ's have been left as buffers along the streams within and adjacent to the sale area.**
- **Areas in which unstable slopes have been identified were removed from the sale area, or bounded out of the harvest area with "Leave Tree Area" tags.**
- **Temporary roads have been located to avoid unstable slopes. Roads and drainage controls have been designed to avoid increasing the erosion and mass wasting potentials and to disconnect discharge from surface waters.**
- **This activity is located within 3 northern spotted owl circles. Approximately 4 acres of Unit 7 are located within 0.7 mile of the site center, and timing restrictions prohibiting road building and timber harvest activities will be instituted from March 1 through August 31 for that part of the unit.**
- **A survey was conducted by a DNR Archaeologist, and one isolated culturally modified tree (CMT) was found. The tree has been buffered within a leave tree clump (skip), in which no activity will take place. Felling and skidding will be away from the CMT.**

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☐Flat, ☐Rolling, ☒Hilly, ☐Steep Slopes, ☐Mountainous, ☐Other:

1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).

The Rock Creek WAU is situated in the western foothills of the Cascade Mountain Range and contains a variety of landforms, ranging in elevation from near sea level at the Columbia River in the south part of the WAU up to approximately 3700 feet in the north part of the WAU. Slopes vary from 0% to over 100%. The climate is moderate with an average of 80 to 110 inches of precipitation annually. Approximately 31% of the WAU, or 12,368 acres, is within the rain-on-snow zone. The major timber type within the WAU is Douglas-fir, with western red cedar, noble and silver fir, western hemlock, red alder, and big leaf maple also present.

2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s)
.
Unit 1 of this proposal is located at approximately 1760 to 2200 feet in elevation. The timber type is primarily Douglas-fir with pure western hemlock stands on north aspects, averaging approximately 61 years of age. Alder and maple also occur along streams and natural openings. There are slopes in the area up to 80% for short distances, but the majority of the unit is 5-40%. This sale area is similar to other timber harvest areas in the WAU.

Unit 2 of this proposal is located at approximately 1700 to 1860 feet in elevation. The timber type is primarily Douglas-fir with a small component of western hemlock, averaging approximately 64 years of age. Alder and maple also occur along streams and natural openings. There are slopes in the unit up to 80% for short distances, but the majority of the unit is 35-65%. This sale area is similar to other timber harvest areas in the WAU.

Unit 3 of this proposal is located at approximately 1700 to 1780 feet in elevation. The timber type is primarily Douglas-fir with a small component of western hemlock, averaging approximately 64 years of age. Alder and maple also occur along streams and natural openings. There are slopes in the unit up to 70% for short distances, but the majority of the unit is 15-50%. This sale area is similar to other timber harvest areas in the WAU.

Unit 4 of this proposal is located at approximately 1300 to 1800 feet in elevation. The timber type is primarily Douglas-fir with a small component of western hemlock, averaging approximately 50 to 64 years of age. Alder and maple also occur along streams and natural openings. There are slopes in the unit up to 85% for short distances, but the majority of the unit is 5-60%. This sale area is similar to other timber harvest areas in the WAU.

Unit 5 of this proposal is located at approximately 1680 feet in elevation. The timber type is primarily alder and maple with a small component of decadent cherry, averaging approximately 30-40 years of age. There are slopes in the unit up to 5% for short distances, but the majority of the unit is 0%.

Unit 6 of this proposal is located at approximately 1000 to 1500 feet in elevation. The timber type is primarily Douglas-fir with a small component of western hemlock, averaging approximately 57 years of age. Alder and maple also occur along streams and natural openings. There are slopes in the unit up to 90% for short distances, but the majority of the unit is 60-80%. This sale area is similar to other timber harvest areas in the WAU.

Unit 7 of this proposal is located at approximately 1200 to 1500 feet in elevation. The timber type is primarily Douglas-fir with pure stands of western hemlock on higher elevation north aspects. The timber in this unit ranges from approximately 42 to 92 years of age. There is a significant cedar component in the southwest portion of the unit. Alder and maple also occur along streams and natural openings. There are slopes in the unit up to 60% for short distances, but the majority of the unit is 0-45%. This sale area is similar to the other timber harvest areas in the WAU.

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope on the site is up to 95% for short distances in localized areas.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. *Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.*

The acres listed in the soils table below are for those areas where timber harvest takes place.

State Soil Survey #	Soil Texture	% Slope	Acres	Mass Wasting Potential	Erosion Potential
0173	**V. Gravelly Loam**	**30-65**	**60**	**Low**	**Medium**
9811	**Gravelly Loam**	**30-65**	**54**	**Low**	**Medium**
7554	**Stony Clay Loam**	**2-30**	**59**	**Low**	**Medium**
5663	**Clay Loam**	**2-15**	**24**	**Insignificant**	**Medium**
9810	**Gravelly loam**	**5-30**	**15**	**Insignificant**	**Medium**
7555	**Stony Clay Loam**	**30-65**	**1**	**High**	**Medium**

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

1) Surface indications:

There are areas with potentially unstable soils that were identified in the vicinity during the course of site visits by a DNR Geologist, the Unit Forester, and multiple visits by the lead Forester. These areas were removed from the harvest area. Some are contained within skips, where no harvest activities will take place, and the rest were bounded out of the sale area. With the exception of Steever 7554, which comprises about 28% of the proposal area, all soils within the sale are listed as stable when disturbed according to the State Soil Survey. All soils contained within the proposal have low or insignificant mass wasting potential. In addition, this proposal is a variable density thinning that is expected to have very little impact on slope integrity. This is because the majority of the trees will remain after thinning, thereby retaining root strength, and continuing to intercept precipitation. A report by a DNR Geologist is available at the Pacific Cascade Region office in Castle Rock for further details.

2) Is there evidence of natural slope failures in the sub-basin(s)?
☐*No* ☒*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*

Fairly large deep-seated landslides occur throughout the WAU and in the vicinity of the sale area. Evidence, such as degree of erosion and the occurrence of local shallow failures having initiated from sensitive portions of the deep slides, indicate that many of the slides are dormant but could be reactivated given the right conditions. Several deep-seated slumps in the vicinity of the sale area appear to be active but moving at slow rates. It is believed that most of the deep-seated slides failed rapidly under different geologic and climatic conditions, and possibly in response to seismic events. More recent natural shallow failures have occurred randomly as variably sized block slides, earth flows along convergent slopes, and some debris slides from hollows. Sensitive slope areas were identified and protected. A report by a DNR Geologist is available at the Pacific Cascade Region office in Castle Rock for further details.

3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?
☐*No* ☒*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*
Associated management activity:

A few side cast failures have occurred where old roads were constructed on steep slopes, improper construction methods were used and/or maintenance was lacking. The proposed new road locations were evaluated and chosen in order to have the least possible affects on slope stability. Debris slides and debris flows have initiated in convergent areas and from at least one landing within the regeneration harvest on private ground north of Units 1 and 2, where ground disturbance was substantial and sensitive slopes were not protected. Several gullies found in Unit 1 along a slope lip may have formed by erosion of old yarding scars.

4) Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?
☐*No* ☒*Yes, describe similarities between the conditions and activities on these sites:*

The proposed site is similar to some sites where failures have occurred previously in the WAU, but this proposal will not have any harvest activity within approximately 128 to 180 feet of type-3 streams, and within 100 feet of type-4 streams. In addition, there will be no harvest activities adjacent to stream headwalls or other sensitive areas in the sale area where evidence suggested slopes are potentially unstable. In addition, road locations were evaluated and chosen in order to have the least possible affects on slope stability.

5) *Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.*

Slope stability protection measures:

- **New roads have been located and designed to avoid any impacts to identified unstable areas.**
- **Areas in which potentially unstable slopes were identified have been removed from the sale area, or bounded out of the harvest area with "Leave Tree Area" tags.**

See additional mitigating measures listed in question B.1.h. below.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Approx. acreage new roads: **1** *Approx. acreage new landings:* **1.5** *Fill source:* **Native material**

Clean rock fill will be utilized for culvert placement, and some fill will be required during road construction. However, road location and design incorporated the need to keep fill volumes to a minimum. All road fill will be material derived locally (compacted native earth).

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Yes, some incidental erosion may occur as a result of this proposal, but should be confined to the associated roads and harvest area. See B. 1. h. below for mitigation.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*

1 % of the proposal will be in permanent rocked running surface.

h. Propose measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.)

Protection measures to reduce erosion associated with roads:

- **Seasonal timing restrictions will be used to minimize road construction activities during wet weather conditions.**
- **Roads will be crowned, ditched and cross drained.**
- **Soils exposed during road construction, including any waste areas, will be treated with erosion control measures, such as re-vegetation.**
- **Roads will maintained as needed to control water runoff and avoid delivery of sediment to live water.**
- **Drainage structures will be properly sized, installed and maintained.**
- **Sediment control measures will be used as necessary during active haul to prevent sediment delivery to water.**
- **Timing restrictions or temporary road shutdown will be used as necessary during active haul to prevent sediment delivery to water.**
- **There will be periodic maintenance and inspection of the road system to insure proper function.**
- **Approximately 11,500 feet of road construction on this sale will be abandoned following the completion of harvest activities.**

Protection measures to reduce erosion associated with active logging operation:

- **Ground yarding will be restricted to slopes less than 35 %.**
- **Cable yarding areas will maintain lead-end suspension will be required on slopes greater than 35 %.**
- **Ground yarding restrictions are prescribed to minimize soil impacts including compaction and rutting.**
- **Skid trails will be water barred as necessary to minimize sediment delivery to live water.**
- **Timber will be felled and yarded away from all streams.**
- **No activity will occur within an average of approximately 128-180 feet of type 3 streams, and 100 feet of type 4 streams, except some road construction and potential crossing with cables for harvest deflection.**

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust *from truck traffic, rock mining, crushing or hauling*, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Minor amounts of engine exhaust from logging equipment and dust from vehicle traffic and logging equipment.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

None

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. *(See timber sale map and forest practice base maps.)*

All streams have been typed using the Interim Water Typing criteria in the Forest Practices Rules.

Unit 1 has two type-3 streams along the southern boundary, which are buffered by an average of 128 to 180 feet. There is also one type-4 stream along the northwest corner of the unit and one type-4 stream along the southwest corner of the unit, both of which are buffered by 100 feet.

Unit 2 has type-3 streams along the northern and southern boundaries. Both streams have been buffered by an average of 128 to 180 feet.

Unit 3 has one type-3 stream along the northern boundary, which is buffered by an average of approximately 180 feet.

Unit 4 has type-4 streams along the northern, eastern, and part of the southern boundaries. All 3 of these streams have been buffered by 100 feet.

Unit 5 has no surface water in the vicinity.

Unit 6 has a type-4 stream along the western boundary and one contained within the northern half of the unit. Both of these streams have been buffered by 100 feet.

Unit 7 has no surface water in the vicinity.

a) Downstream water bodies:

b)

The streams on this site flow primarily northeast and are tributary to Rock Creek, a type-1 stream, which is located approximately 1400 feet northeast of the sale area.

b) Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)
Stream	**3**	**4**	**128-180 ft.**
Stream	**4**	**6**	**100 ft.**

c) List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.

- **All type 3 streams within or adjacent to this proposal have been buffered by an average of approximately 128 to 180 feet on each side; In addition, all type 4 streams have been buffered by 100 feet, except some road construction and potential crossing with cables for harvest deflection.**

  This activity is a thinning, so the trees in the RMZ's will not be subject to major wind-throw and no wind buffer is needed.

2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.
☐*No* ☒*Yes (See RMZ/WMZ table above and timber sale map.)*
Description (include culverts):

Timber felling, bucking, yarding, and road building will take place within 200 feet of the described waters. In addition, road-building activities will take place during road reconstruction over type-3 streams. Yarding corridors may be required on a type-4 stream in Unit 6. Full suspension will be required for any logs yarded over that stream. All other timber will be felled and yarded away from streams. Type-3 streams have been buffered by an average of approximately 128 to 180 feet, and there will be no harvest activity or road right-of-way removal allowed in these zones.

2) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. *(Include diversions for fish-passage culvert installation.)*
☒*No* ☐*Yes, description:*

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
☒*No* ☐*Yes, describe location:*

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
☒*No* ☐*Yes, type and volume:*

7) *Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?*

These sub-drainage basins do contain terrain susceptible to surface erosion and/or mass wasting. These conditions can be seen on a small scale on some cut/fill slopes due to poor, outdated road building practices. Generally, the high potential areas are located on steeper, convergent upland slopes and on some stream adjacent slopes that are steep and generally inner gorge-like. Except where debris flows have developed, failures from upland slopes probably don't deliver sediment to live waters, but indirectly deliver via erosion until the slide scar is healed and re-vegetated. Failures from inner gorge-like slopes will generally directly deliver sediment. With the mitigating measures to be implemented, the potential for the proposed activity to affect slope stability or to induce erosion is minimal. See questions B.1.c., B.1.d., B.1.f., B.1.h., and B.3.9).

8) *Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?*
☐*No* ☒*Yes, describe changes and possible causes:*

See question B.3.a.13) below.

9) *Could this proposal affect water quality based on the answers to the questions 1-8 above?*
☐*No* ☒*Yes, explain:*

This proposal may cause some minimal increase in sedimentation as a result of road construction and harvest operations. Buffered riparian areas will help preserve natural stream and water quality.

10) *What are the approximate road miles per square mile in the WAU and sub-basin(s)?*

The Rock Creek WAU averages approximately 4 miles of road per square mile across all ownerships. It is estimated that less than 1% of the roads within the WAU carry surface water runoff for extended periods of time.

Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?
☐*No* ☒*Yes, describe:*

It can be reasonably expected, and is likely, that there are areas where forest roads or road ditches intercept sub-surface flow and deliver surface waters to streams. The approved Road Maintenance and Abandonment Plan (RMAP) #2900196 identifies those concern areas and addresses the timeline for repairs/abandonment.

11) *Is the proposal within a significant rain-on-snow (ROS) zone? If not,* ***STOP HERE*** *and go to question B-3-a-13 below. Use the WAU <u>or</u> sub-basin(s) for the ROS percentage questions below.*
☐No ☒Yes, approximate percent of WAU in significant ROS zone.

Approximately 31% of the WAU is within the rain-on-snow zone.

Approximately 1% of sub-basin # 2, 23% of sub-basin # 7, and 53% of sub-basin # 8 are within the rain-on-snow zone.

12**)** *If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU <u>or</u> sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?*

Approximately 58% of the WAU is hydrologically mature.

13) *Is there evidence of changes to channels associated with peak flows in the WAU <u>or</u> sub-basin(s)?*
☐*No* ☒*Yes, describe observations:*

In the winter of 1996, a 100-year event occurred. The rainstorm set rainfall and flood level records in Pacific Cascade Washington and Northwestern Oregon. The event caused many shallow mass-wasting events. Many stream channels were affected by this flood event. The full extent if this is not known. Many channels were altered in this event, due to high stream flows with accompanying sediment loads and possibly large woody debris delivery.

14) *Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.*

This proposal may slightly change the timing/duration/amount of peak flow; flow rates may increase slightly during low flow periods during the first decade of the new forest. See B.33a.16 below.

15) *Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?*
☐*No* ☒*Yes, possible impacts:*

The city of Stevenson has a secondary domestic water intake on Rock Creek, a type-1 stream, approximately 2 miles from this proposal. Due to the distance from the intake, the type of harvest, and large stream buffers along with all of the other mitigating measures outlined in this document, no impact is anticipated from this activity.

16) *Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.*

This proposal is expected to have no noticeable impact on peak flow or flooding in this WAU.

b. Ground *Water*:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

No

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Minor amounts of oil, fuel and other lubricants may inadvertently be discharges to the ground as a result of heavy equipment use or mechanical failure. No lubricants will be disposed of on-site.

3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?
☒*No* ☐*Yes, describe:*

a) Note protection measures, if any.

This activity is not expected to cause changes in groundwater that could affect downstream or down-slope water resources.

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Storm water and some intercepted subsurface flow will be the only runoff associated with this proposal. On roads, storm runoff will be collected by road ditches and diverted through cross-drains over energy dissipaters and onto the forest floor. Within the harvest unit, runoff will follow natural topography and be largely absorbed into the ground, with the excess entering streams.

2) Could waste materials enter ground or surface waters? If so, generally describe.

Due to the wide buffers on the streams associated with this proposal, no logging slash from harvest activities will enter any perennial waters. Any logging slash that inadvertently enters streams during the process of road construction or reconstruction will be removed immediately.

a) Note protection measures, if any.

None

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)

See B.1.h above for additional erosion control measures.

4. Plants

a. Check or circle types of vegetation found on the site:

☒deciduous tree: ☒alder, ☒maple, ☐aspen, ☐*cottonwood,* ☐*western larch,* ☐*birch,* ☒other: **wild cherry, cascara**
☒evergreen tree: ☒*Douglas fir,* ☒*grand fir,* ☒*Pacific silver fir,* ☐*ponderosa pine,* ☐*lodgepole pine,* ☒*western hemlock,* ☐*mountain hemlock,* ☐*Englemann spruce,* ☐*Sitka spruce,* ☒*red cedar,* ☐*yellow cedar,* ☐other:
☒shrubs: ☒*huckleberry,* ☒*salmonberry,* ☒*salal,* ☒*other:Oregon grape, elderberry, hazelnut*
☐grass
☐pasture
☐crop or grain
☒wet soil plants: ☐cattail, ☐buttercup, ☐bullrush, ☒skunk cabbage, ☒*devil's club,* ☐other:
☐water plants: ☐water lily, ☐eelgrass, ☐milfoil, ☐other:
☒other types of vegetation: **braken fern, sword fern, maidenhair fern, blackberry, thimbleberry**
☐*plant communities of concern:*

b. What kind and amount of vegetation will be removed or altered? *(See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)*

Approximately 2880 MBF of primarily Douglas-fir, with small components of western hemlock, true fir, alder, and big leaf maple will be removed from the site. The age of this timber ranges from 42 to 92 years of age.

1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: http://www.dnr.wa.gov under "SEPA Center.")

Unit 1
Northern boundary – Primarily Douglas-fir averaging approximately 10 years in age.
Eastern & Southern boundary – Primarily Douglas-fir averaging approximately 64 years in age.
Western boundary – Primarily Douglas-fir and western hemlock approximately 62 years in age.

Unit 2
This unit is entirely surrounded by primarily Douglas-fir averaging approximately 64 years in age.

Unit 3
Northern, Southern, & Western boundary – Primarily Douglas-fir averaging approximately 64 years in age.
Eastern boundary – Douglas-fir averaging approximately 3 years in age.

Unit 4
Northern boundary – Primarily Douglas-fir averaging approximately 53 years in age.
Eastern boundary – Primarily Douglas-fir averaging approximately 57 years in age.
Southern boundary – This boundary is bordered by a BPA power line. South of the power line is a Douglas-fir stand, which averages approximately 62 years in age.
Western boundary – Primarily Douglas-fir averaging approximately 62 years in age.

Unit 5
This unit is surrounded by primarily Douglas-fir averaging approximately 62 years in age.

Unit 6
Northern, Southern, & Western boundaries – Primarily Douglas-fir averaging approximately 57 years in age.
Eastern boundaries – Primarily Douglas-fir averaging approximately 62 years in age.

Unit 7
Northern boundary – Primarily Douglas-fir averaging approximately 62 to 92 years in age.
Eastern boundary – Primarily Douglas-fir and big leaf maple averaging approximately 8 to 10 years in age.
Southern boundary – Primarily Douglas-fir, western hemlock, and western cedar averaging approximately 62 years in age. There is also a component of Douglas-fir averaging approximately 8 years in age.
Western boundary – Primarily Douglas-fir and western hemlock averaging approximately 62 years in age.

2) Retention tree plan:

This sale is a variable density thinning. Approximately 2/3 of the timber volume, on average, will be left un-harvested. Unit 5, which is a 2 acre unit comprised mostly of hardwoods , will have all of the hardwoods removed. All conifers will be left, and the unit will be planted at approximately 300 trees per acre after harvest activities are complete. A retention tree plan is not applicable to the rest of the units.

c. List threatened or endangered *plant* species known to be on or near the site.

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
4	**37447**	**Howell's Daisy**	**SP CONCERN: Species of Concern**	**THREATENED: Likely to become endangered in WA.**

Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The P&T Special Concerns Report revealed that the Howell's Daisy, a species of concern, is located near Unit 4. Approximately 1 acre of that unit overlaps with the polygon representing the Howell's Daisy. The Washington Natural Heritage Program was contacted, and we were informed that Unit 4 is located approximately 1000 feet away from the nearest actual plant location. Less than 150 feet of the unit overlaps into the polygon, which represents a large buffer around the known plant sites. A representative from the Heritage Program informed us that there is no issue with the location of the unit boundary.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: **Please see question 2) above.**

5. Animal

a. Circle or check any birds animals *or unique habitats* which have been observed on or near the site or are known to be on or near the site:

birds: ☒hawk, ☐heron, ☐eagle, ☒songbirds, ☐*pigeon*, ☒other: various owls, ravens, grouse
mammals: ☒deer, ☒bear, ☒elk, ☐beaver, ☒other: coyote, mountain beaver, rabitt, bats, squirrels, raccoons, cougar
fish: ☐bass, ☐salmon, ☐trout, ☐herring, ☐shellfish, ☐other:
unique habitats: ☐*talus slopes*, ☐*caves*, ☐*cliffs*, ☐*oak woodlands*, ☐*balds*, ☐*mineral springs*

b. List any threatened or endangered species known to be on or near the site *(include federal- and state-listed species).*

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
1	**37444**	**SPOTTED OWL: Site:667-STEEP CREEK**	**THREATENED**	**ENDANGERED**
1	**37444**	**SPOTTED OWL: Site:302-BUDWEISER CREEK**	**THREATENED**	**ENDANGERED**
2	**37445**	**SPOTTED OWL: Site:667-STEEP CREEK**	**THREATENED**	**ENDANGERED**
3	**37446**	**SPOTTED OWL: Site:765-RED BLUFFS**	**THREATENED**	**ENDANGERED**

3	37446	SPOTTED OWL: Site:302-BUDWEISER CREEK	THREATENED	ENDANGERED
4	37447	SPOTTED OWL: Site:765-RED BLUFFS	THREATENED	ENDANGERED
5	37448	SPOTTED OWL: Site:765-RED BLUFFS	THREATENED	ENDANGERED
6	37449	SPOTTED OWL: Site:765-RED BLUFFS	THREATENED	ENDANGERED
6	37449	SPOTTED OWL: Site:302-BUDWEISER CREEK	THREATENED	ENDANGERED
7	37450	SPOTTED OWL: Site:765-RED BLUFFS	THREATENED	ENDANGERED

c. Is the site part of a migration route? If so, explain.
☒*Pacific flyway* ☐*Other migration route:* *Explain if any boxes checked:*

This proposal is located in the Columbia River flyway, which is part of the Pacific Northwest forests. Many Neo-tropical birds are closely associated with riparian areas, cliffs, snags and structurally unique trees. Riparian areas and special habitats are protected through implementation of DNR's Habitat Conservation Plan. Migratory waterfowl also use the Columbia River flyway; the area for this proposal is not generally the type of area used for resting or feeding by migratory waterfowl.

d. Proposed measures to preserve or enhance wildlife, if any:

This activity conforms to the 1992 Forest Resource Plan, the 1997 Habitat Conservation Plan and Forest Practices rules and regulations.

- **This proposal is a variable density thinning that will be used to create skips, gaps, and heavy/light thinned areas to promote a multi-layered canopy. This will enhance both structural and species diversity for the development of spotted owl habitat.**
- **This activity is located within 3 northern spotted owl circles. Approximately 4 acres of Unit 7 are located within 0.7 mile of a site center, and timing restrictions prohibiting road building and timber harvest activities will be instituted from March 1 through August 31 for that part of the unit.**
- **Type-3 stream RMZ's with an average of 128 to 180 foot wide buffer areas, and type 4 streams with an average buffer width of 100 feet on each side of the stream will eliminate or minimize sediment introduction into streams.**
- **Wet areas will be protected, therefore preserving amphibian habitat.**
- **Any snags to be felled for safety reasons shall remain where they fall.**
- **All existing down woody debris will remain on site.**

1) Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.
Species /Habitat: Protection Measures:
Species /Habitat: Protection Measures:
Species /Habitat: Protection Measures:

See question B.5.d. above

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Does not apply.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Minimal health hazards due to operating heavy equipment and the minor spillage of fuel and lubricating oils are always present with this type of operation. Contractual clauses require operators to use established safety standards. The risk of forest fire may be increases for approximately two years following harvesting due to logging slash.

1) Describe special emergency services that might be required.

Department of Natural Resources, private and rural fire department fire suppression resources; emergency medical or air ambulance for personnel injuries. Hazardous material spills may require Department of Ecology and/or county assistance.

2) Proposed measures to reduce or control environmental health hazards, if any:

Fire equipment will be required on-site during closed fire season. Operations will cease if relative humidity falls below 30%.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.

Heavy equipment, chain saws, yarding whistled and trucks will produce noise during periods of operation.

3) Proposed measures to reduce or control noise impacts, if any:

None planned.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? *(Site includes the complete proposal, e.g. rock pits and access roads.)*

- **Timber Production, Forest management**
- **Rock from rock pits, may be sold to other forestland owners for forest road maintenance.**

b. Has the site been used for agriculture? If so, describe.

No

c. Describe any structures on the site.

None

d. Will any structures be demolished? If so, what?

No

e. What is the current zoning classification of the site?

Forest Land

f. What is the current comprehensive plan designation of the site?

Resource Land

g. If applicable, what is the current shoreline master program designation of the site?

Not Applicable.

h. Has any part of the site been classified as an “environmentally sensitive” area? If so, specify.

No

i. Approximately how many people would reside or work in the completed project?

None

j. Approximately how many people would the completed project displace?

None

k. Proposed measures to avoid or reduce displacement impacts, if any:

None

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

These harvest units, will be reforested with commercial species and retained as forestland.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None

c. Proposed measures to reduce or control housing impacts, if any:

None

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?

Does not apply.

b. What views in the immediate vicinity would be altered or obstructed?

1) Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?
☐*No* ☒*Yes, viewing location:* **Stevenson, Wa. and parts of the Columbia River Gorge National Scenic Area.**

2) Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?
☐*No* ☒*Yes, scenic corridor name:* **Columbia River Gorge National Scenic Area**

3) How will this proposal affect any views described in 1) or 2) above?

Approximately one quarter of this proposal (parts of Unit 7) is visible from parts of State Road 14, Interstate 84, Stevenson, and the Columbia River within the Columbia River Gorge National Scenic Area. This part of the proposal is contained within the Columbia River Gorge "Special Management Area".

This proposal is a variable density thinning with the primary objective of enhancing and creating spotted owl habitat. It is not likely that any of this management activity will be noticeable from those areas referenced above.

c. Proposed measures to reduce or control aesthetic impacts, if any:

This activity has gone through the Consistency Determination process for the Columbia River Gorge National Scenic Area (CRGNSA) Act from the United States Forest Service (USFS). It was determined that the proposal is consistent with the CRGNSA Act, provided certain conditions were met. These conditions have been addressed in the timber sale contract and road plan. Please see the approved determination dated June 11, 2003, and located in the Pacific Cascade Region office in Castle Rock for a list of the these conditions and further details.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No

c. What existing off-site sources of light or glare may affect your proposal?

None

d. Proposed measures to reduce or control light and glare impacts, if any:

None

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Hunting, Mountain Biking and hiking.

b. Would the proposed project displace any existing recreational uses? If so, describe:

Recreational activities may be temporarily interrupted during periods of operation on the site.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

With the exception of the CG-2020, all roads accessing the project area are dead-end on state land, so it is expected that there will be minimal public use. The project area will be closed to public access during periods of operation.

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None were found in a search of the TRAX database or are known through local knowledge.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

A survey was conducted by a DNR Archaeologist, and one isolated culturally modified tree (CMT) was found.

c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)

The tree has been buffered within a leave tree clump (skip) in which no activity will take place. Felling and skidding will be away from the CMT.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

See A.12.b and the timber sale vicinity map.

1) Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?

No

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No

c. How many parking spaces would the completed project have? How many would the project eliminate?

None

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

Some new forest roads will be constructed and some existing roads will be improved. See A.11.c for details.

1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?

There will be no impact from this proposal.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

During harvest, 25-30 vehicle trips per day to the sale area may occur. This will take place for three to four months. Upon completion of harvest activities, traffic levels will vary depending on seasonal use.

g. Proposed measures to reduce or control transportation impacts, if any:

None

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No

b. Proposed measures to reduce or control direct impacts on public services, if any.

None

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

None

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by: Brian Poehlein Unit Forester Date:
Title

Reviewed by: Date:
State Lands Assistant Manager

Comments: